

**Information Needs of Agricultural  
Exporters: Results from  
A Focus Group Series**

**by**

**Deborah Streeter, Nelson Bills,  
Jane Maestro-Scherer and Rob Neenan**

Department of Agricultural, Resource, and Managerial Economics  
Cornell University Agricultural Experiment Station  
College of Agriculture and Life Sciences  
Cornell University, Ithaca, NY 14853-7801

It is the Policy of Cornell University actively to support equality of educational and employment opportunity. No person shall be denied admission to any educational program or activity or be denied employment on the basis of any legally prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, sex, age or handicap. The University is committed to the maintenance of affirmative action programs which will assure the continuation of such equality of opportunity.

**Information Needs of Agricultural Exporters: Results from a Focus Group Series<sup>\*</sup>**

**by**

**Deborah Streeter, Nelson Bills and Jane Maestro-Scherer  
Cornell University, and Rob Neenan, USDA**

---

<sup>\*</sup> This research was supported under Cooperative Agreement No. 12-25-A-3423, between the USDA's Agricultural Marketing Service and the Department of Agricultural, Resource and Managerial Economics.

## **Abstract**

Focus groups were held to provide more in-depth information on issues raised by a large-scale survey of agricultural exporters conducted in 1994 by USDA. Two focus groups were held in New York State and two in California, and the total of 28 participants included both experienced and new exporters of fruit products. The emphasis of the discussion was on the information-seeking behaviors of export firms and businesses that are considering entry in off-shore markets, and on identifying potential information gaps or obstacles to success in the exporting arena. Participants were also asked questions about their knowledge of and attitude toward new (Internet-based) technologies to deliver information on exporting.

The findings of the study revealed some important divergences between new entrants and those more experienced at selling overseas. While experienced exporters have well-developed informal networks of information and focus their search strategies on better long term and short term supply/demand information, "would-be" exporters tend to be more concerned with locating a "qualified" buyers list, and getting information on export procedures, and trade logistics. In addition, would-be exporters expressed frustration with two types of obstacles where information is least likely to solve the problem: barriers caused by time lags and exogenous factors (such as precipitous changes in a foreign government). While successful exporters also express concern about time-lag related risks, they envision insurance and other risk management strategies as most appropriate and do not particularly look to the government to solve the problem.

Search strategies of most producers still rely almost exclusively on phone, fax, and paper-based information. The focus group discussion revealed that the pressure of time on managers and the relationship aspect of business result in a strong reliance on information from personal contacts which may keep exporters from looking further for more formal sources of information (such as products produced by USDA).

There was a cautious attitude among participants on new information technologies due to the confusing nature of the Internet and the lack of security for transactions. However, experienced exporters think that over time, as the Internet environment becomes more stable and easier to use, it will emerge as an important venue for sending and receiving information. "Would-be" exporters had a higher level of skepticism.

Focus group participants raised two types of information obstacles that could be met with Internet-type products: the challenge of building a network of contacts, and the difficulty of sorting through massive amounts of information. Use of e-mail in other business environments has become a standard method of building professional networks. In addition Web product development is now heavily focused on building useful filters for users interested in linking to various sources of information, but who also wish to have a focused search strategy. Using digital images that can be easily transmitted, transactions could be more closely monitored and coordinated. While no one saw information technologies as a panacea, there was genuine interest in its potential for increasing the ease of exporting.

## **Background**

The phrase “export or die” speaks to the urgency and the inevitability of foreign markets as a focus for U.S. businesses. Producers in the U.S. whose markets traditionally have been domestic are being both pushed and pulled into the global arena. Saturated domestic markets, accompanied by low prices are an impetus to consider exports in the market mix, while new markets, especially where characterized by higher prices, serve as a magnet for U.S. goods and services.

The push and pull of export markets is uneven across industries. Exporting is old news for American agriculture. Indeed, the U.S. farm economy turns on exports, and has since colonial times. Prospects for sales in off-shore markets influence production/marketing decisions in the American food and agriculture system on a daily basis. Agricultural exports totaled \$54.2 billion in FY1995, accounting for about 10 percent of total U.S. export trade (USDA, 1996). In recent years exports have accounted for about 20 percent of gross farm income, and generated over one million farming and non-farm jobs (USDA, 1993). The top ten markets for U.S. agricultural exports include Japan, the Netherlands, Canada, Mexico, Taiwan, South Korea, Hong Kong, Russia, China, and Egypt. Collectively, these nations account for 69 percent of total U.S. agricultural exports (USDA, 1996). The leading export commodities include grain, feed, and oilseeds (\$26.3 billion), fruit and vegetables (\$9.2), meat and poultry (\$6.3 billion), cotton (\$3.5 billion), hides and skins (\$1.7 billion), tobacco (\$1.3 billion), dried nuts (\$1.4 billion), and snack foods (\$1.3 billion) (USDA, 1996).

In addition to the growth in export of bulk commodities, there has been considerable growth in exports of processed and other high value agricultural products such as snack food, beverages, and pet food over the last decade. Exports of these and other consumer-oriented high value products have increased by nearly 80 percent since the early 1980's (USDA, 1993b). Growth in trade provides opportunities to a number of firms producing an array of products. Expanding interest in, and opportunities for, international trade may require the USDA to provide more and different services to exporters.

Surges in export volume in recent years for the food and agriculture system have generated even more fanfare over the global marketplace and the economic fate of U.S. agriculture. Nonetheless, many agricultural businesses often face fundamental questions when beginning the journey towards overseas sales. At the same time, policy makers debate the best way to spur export sales. The questions raised around the issue of export promotion are persistent and plague many organizations which network with and provide information to American businesses. In the food and agriculture sphere, the USDA has a unique capacity to support export initiatives, but decision makers in the Congress and the USDA are pondering the most effective way to target and deliver support to would-be exporters.

It is both the burgeoning interest of U.S. producers in global markets and the desire of policymakers to find important ways to encourage export activity that motivate the research discussed in this report. We used results from a recent national survey together with the findings of four focus groups to investigate exporters and their quest for information in an effort to answer the following questions: What information products are most useful? Is information the key barrier, or are other exporting obstacles even more difficult to overcome? What is the information-seeking behavior of small and large producers? Do newer technologies provide a realistic strategy for disseminating information more quickly?

These and other issues were addressed in a two-pronged approach that began with a 1994 survey of U.S. firms engaged in the export business and ended with a series of four focus groups conducted with New York and California businesses who produce and or export fresh market apples. This report follows a companion 1995 report that highlighted results obtained from the 1994 national survey (Bills, Maestro-Scherer, and Neenan). The survey results helped motivate the effort reported here, in which a focus group approach was used to refine ideas about the information-seeking behaviors of export firms and businesses that are considering entry in off-shore markets.

Before turning to the focus group effort and the results obtained, we first visit the economic literature to summarize some of the previous empirical work, with particular attention to the role of information in a decision to penetrate off-shore market. Then, we turn to a conceptual framework for the focus group study.

To provide context, we briefly discuss trends in the apple industry and general findings of the large 1994 survey of agricultural exporters. The rest of the report is devoted to the methodology and findings of the focus groups.

### **Overview of Literature on Information and Exports**

It is important to note that a few important themes dominate the literature. These themes include 1) exploring differences between exporters and non-exporters to identify barriers to exporting and key success factors, 2) examining the relevance of firm size in export decisions, and 3) discussing the role of government in export promotion.

#### *Differences between Exporters and Non-Exporters: Barriers and Success Factors*

An excellent overview to the discussion of the challenges to exporters is a 1986 study by Kedia and Chhokar, who review various studies which have explored the barriers to exporting, including, among others: attitudinal barriers in managerial mindset (Simpson and Kujawa, 1974), difficulties in identifying foreign markets (Alexandries, 1971), lack of knowledge about export procedures (Pavord and Bogart, 1975), lack of exposure to other cultures, (Pavord and Bogart), difficulties in financing export and collecting payment (Bilkey, 1982). The intent of the Kedia and Chhokar study was to rank export obstacles or barriers in terms of importance for non-exporters and exporters. They discovered interesting differences, including the fact that non-exporters ranked knowing export procedures first, while exporters viewed obtaining information on prospective buyers as the number one factor of importance. In a similar paper with an excellent literature review, Burton and Schelgelmilch (1987) profiled non exporters and exporters and found that exporters were characterized by a readiness to change and a willingness to conduct an intensive information search. By contrast non-exporters were found more complacent as managers and put greater emphasis on short-term goals.

The literature also includes studies which focus on export barriers for agricultural and food companies in particular. A study of 37 food processors in Louisiana by Kedia and Chhokar found that export managers cite seven factors as perceived barriers to exporting: difficulty in identifying foreign markets, lack of knowledge about exporting procedures, lack of exposure to other cultures or ways of doing business, extra time and paperwork required, difficulty in dealing with government regulations, inability to finance sales, and product distribution problems. In a survey of 55 agricultural firms in Oklahoma, Hollon (1989) found that key barriers for both new and experienced exporting firms include a lack of knowledge regarding export competition and import restrictions, product promotion or distribution problems, and financing difficulties.

Transportation and logistics considerations are also important aspects of the export marketing process. Rabino (1980) found that product distribution, packaging, transportation, and logistics are perceived by exporters as potential major export problems, and that considerable information and assistance is required to overcome these obstacles. In a survey of forest product firms, Hammett and deForest (1993) found that one of the major reasons firms choose to discontinue exporting is a lack of knowledge of export logistics. A group of 178 Canadian firms surveyed by Barker and Kaynak (1992) ranked "transport difficulties" as the third most important impediment to exporting.

A common finding of research regarding barriers to trade is that to minimize or eliminate inhibitions by management regarding exporting, a firm must first acquire a significant amount of information regarding product marketing, regulations, financing, and foreign business practices. In their survey of agribusiness firms, Barringer, Wortman and Macy (1994) found that perceived barriers result, in part, from a lack of knowledge and information regarding export markets. Other surveys have generated similar findings. Kedia and Chhokar's (1986) survey results indicate that exporters rank three factors as most important to export success: obtaining market information, learning how to market overseas, and understanding foreign business practices.

While research findings have stressed the importance of data collection, market analysis, and planning in the export development process, many firms fail to devote resources to these activities. Charlet and Henneberry (1991) found that 55 percent of exporters and 88 percent of non-exporters surveyed in Oklahoma had not conducted any foreign market analysis. Developing a business plan is also considered a key step in the export process. However, in a study of forest product exporters in Oregon, Gottko and McMahon found that less than one-third of the firms had prepared written business plans.

### *Scale Issues*

Another vein of the export literature looks more closely at issues of scale. A repeated theme is that small and medium sized firms are a significant reservoir of untapped export potential and therefore should be exporting a lot, even though they are not. Empirical results are mixed on whether firm size is a key determinant of export behavior. For example, Czinkota and Johnston (1985) found no relationship, while Reid (1983, 1985) did find such a relationship. While the desirability of exporting for small firms as a class may be accepted *a priori*, it is conceivable that managers face high information gathering costs and attitudinal barriers. Alternatively, it may be that for small firms in a very large economy it is more expensive to research and employ export strategies as compared to expanding distribution in domestic markets. Information gaps could exacerbate the problem by altering perceptions of potential risks associated with exporting.

Firms involved with agricultural exporting range considerably in terms of size, but the trade in a number of commodities tends to be concentrated among a limited number of large firms. Charlet and Henneberry (1991) found that the flexibility of small businesses can enhance their export potential because such firms are able to adapt quickly to market conditions and produce specialized products to meet an importer's specific needs. Yaprak (1985) also emphasizes the unique ability of smaller firms to respond quickly to changes in the market, but points out that smaller firms also experience difficulties in exporting due to certain inherent demographic or behavioural characteristics. Walters and Samiee (1990) cite a 1988 Dun and Bradstreet survey that showed that less than 10% of U.S. firms with fewer than 100 employees currently export.

## *Role of Government*

Several studies have suggested that the Federal government can, and should, help fulfill some of the information and assistance requirements of prospective and current agricultural exporters. Hollon (1989) found that agricultural exporters in Texas had significant gaps in their understanding of export trade and market opportunities, and that more federal assistance targeted to small firms was required to address their needs. However, some firms are either not aware of USDA services, or are choosing not to use USDA services. Forest product exporters surveyed by Gottko and McMahon indicated that they relied on private sources such as trading companies and export agents for information and assistance regarding exporting and market opportunities; only 16 percent of exporters and 41 percent of non-exporters that they surveyed had ever contacted USDA for information.

In a more recent work on export issues, Jenni (1996) draws on practical experience working as an agricultural attaché with the USDA's Foreign Agricultural Service (FAS) in Japan. Jenni chooses to highlight three key issues. The first is the divergence between the stated strategy of USDA, to promote high-value-added exports, and the agency's traditional strength, which is to collect and disseminate information on raw or bulk farm commodities. The second point raised by Jenni's paper is that often "would-be" exporters are worried about obstacles that in practice are not as important as other considerations. Finally, Jenni points out the lack of an informational infrastructure for connecting FAS to businesses interested in exporting. He argues that considerable amounts of excellent market research is simply lost in the shuffle because there is no effective distribution method. In addition, because of the information gap, the agency has particular trouble identifying and recruiting high-value-added products with excellent export potential.

While the studies cited here are a small sampling of the accumulated literature on export issues, they illustrate the characteristic concerns of researchers in the area. The literature is filled with attempts to answer the question of how exporters differ from non-exporters<sup>1</sup>, and how size comes into play. A relatively new theme, however, is the role of information technology in the export journeys of U.S. producers. While contributing to the investigation of success factors for export experts, this study also pushes the inquiry further to examine the ways that information searches are currently happening and how newer technologies might contribute in the future.

## **A Conceptual Framework**

An examination of the literature reveals many overlapping and interrelated themes, pointing to the need for a unifying framework to guide an examination of the issues surrounding overseas sales. The series of concept maps shown in Figures 1 and 2 help to show the relationships between many aspects of exporting, and served as a general framework for the study.

Beginning with the broadest perspective (Figure 1), we can see that a firm makes choices about allocating production between export and domestic activities. In theory, the choices should be made based on the relative risks and returns from the two alternative markets. In addition, certain characteristics of the firm, such as size, location, product or service

---

<sup>1</sup> The terms "non-exporter" and "would-be exporter" are used interchangeably in this report. However, a subtle distinction in other parts of the literature is that for some studies there is no knowledge about whether or not non-exporters have a desire to start selling overseas. Such studies simply compare firms that are exporting with others who are not.



sales. The series of concept maps shown in Figures 1 and 2 help to show the relationships between many aspects of exporting, and served as a general framework for the study.

Beginning with the broadest perspective (Figure 1), we can see that a firm makes choices about allocating production between export and domestic activities. In theory, the choices should be made based on the relative risks and returns from the two alternative markets. In addition, certain characteristics of the firm, such as size, location, product or service characteristics, and management style would also influence the market mix between domestic and export sales.

Thus, understanding the company's view of the risks and returns associated with the export market became an important focus of our research. Figure 1 also indicates some reasons returns to exports may be perceived as high: untapped markets (e.g., Eastern Block countries), competitive advantages in terms of speed of delivery, price or quality, the existence of certain "premium niches" for USA products, and the availability of very large markets (e.g., China). Based on previous research, it is clear that issues such as the following would be viewed as adding risk to export activities: changes in currency, lack of a recourse for nonpayment, less infrastructure for transactions, potential for changes in legislation and political structure, and intercultural difficulties.

A more detailed look at the risks involved in the export arena can be viewed in Figure 2. Export markets obviously can be viewed as risky when considering the possibility that foreign business firms and, indeed, foreign governments may be unstable. The latter may put up unexpected barriers to trade, and can suddenly change phyto-sanitary regulations in a market. However, another category of risk factors results simply from the time lags that occur between sale and delivery of the goods. Information gaps can be a third element that makes export markets seem risky, since exporters may lack information both at the macro-level (e.g., where are the new markets?) and at the micro level (e.g., what cultural differences exist in this particular market and how do they impact the acceptance of my product?).

Information, whether it comes from private or public sources, cannot completely eliminate the risks of exporting. However, information can substantially lessen the gaps that exist, and with increased levels of technology (such as video and bar-coding), even the time lag problems may be somewhat lessened. The use and role of information in reducing the perceived risks depends, in part, on certain managerial attributes, such as the level of international experience, the attitude to risk, and the search strategies that typify the manager's approach to new markets.

For example, international experience of the manager may lessen the perceived risks of exporting by decreasing some of the information gaps related to cultural differences and market characteristics, regulations, and distribution systems. Attitude to risk on the part of the manager can influence the way outcomes are measured, and less risk averse managers may be better able to withstand the stresses associated with changes from outside factors, information gaps, and time lags. Attitude to risk can also influence search strategies. For example, an extremely risk averse manager might require more information, or information from a variety of sources in order to reduce exposure. A less risk-averse manager might be satisfied with an informal or focused search strategy. In turn, the search strategies of the manager can influence whether there is a strong focus on traditional information sources, such as contacts (people-based information sources) and print, or whether newer delivery vehicles, involving electronics and video are emphasized.

Figure 1. Concept Map of Export Choice by Firm

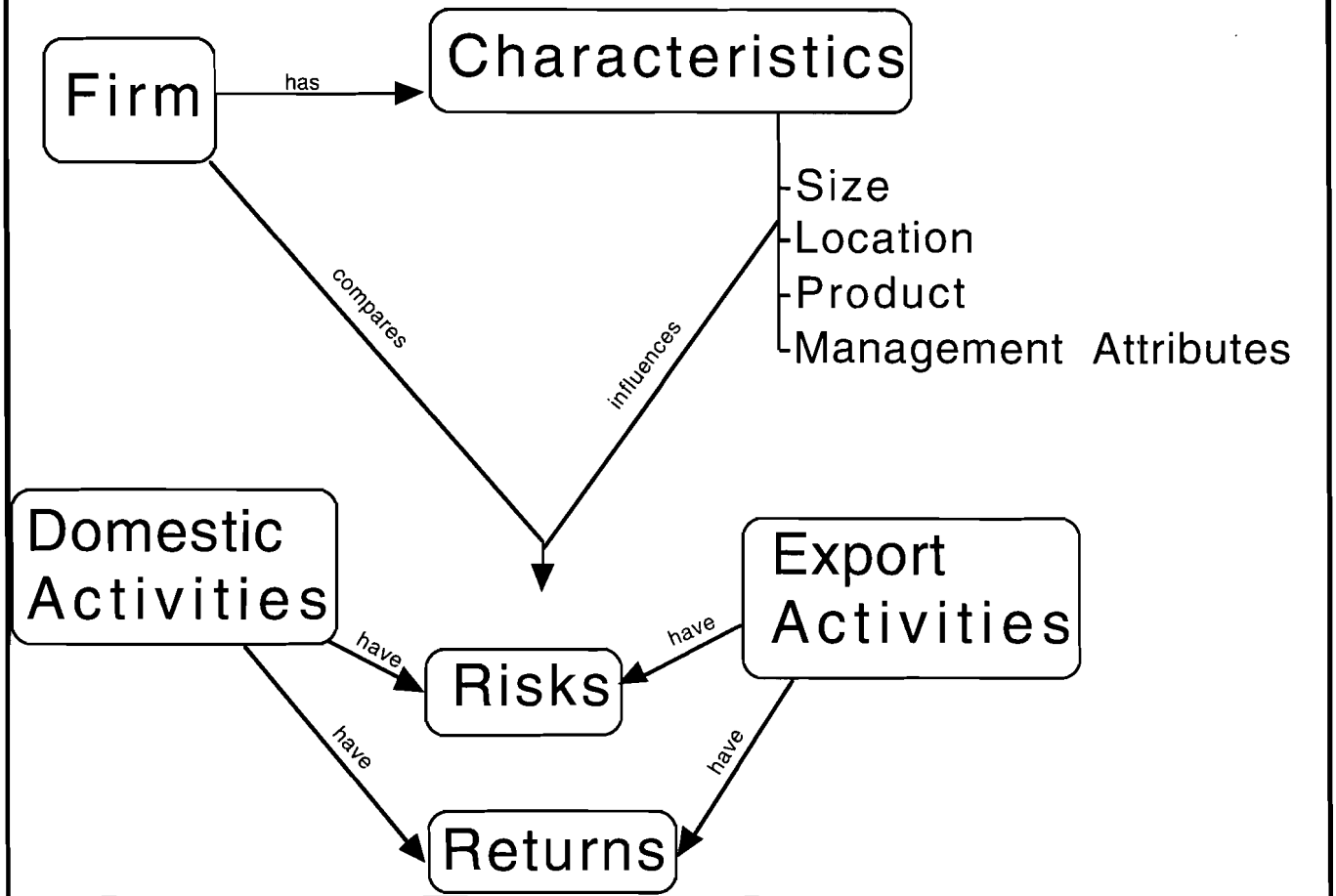
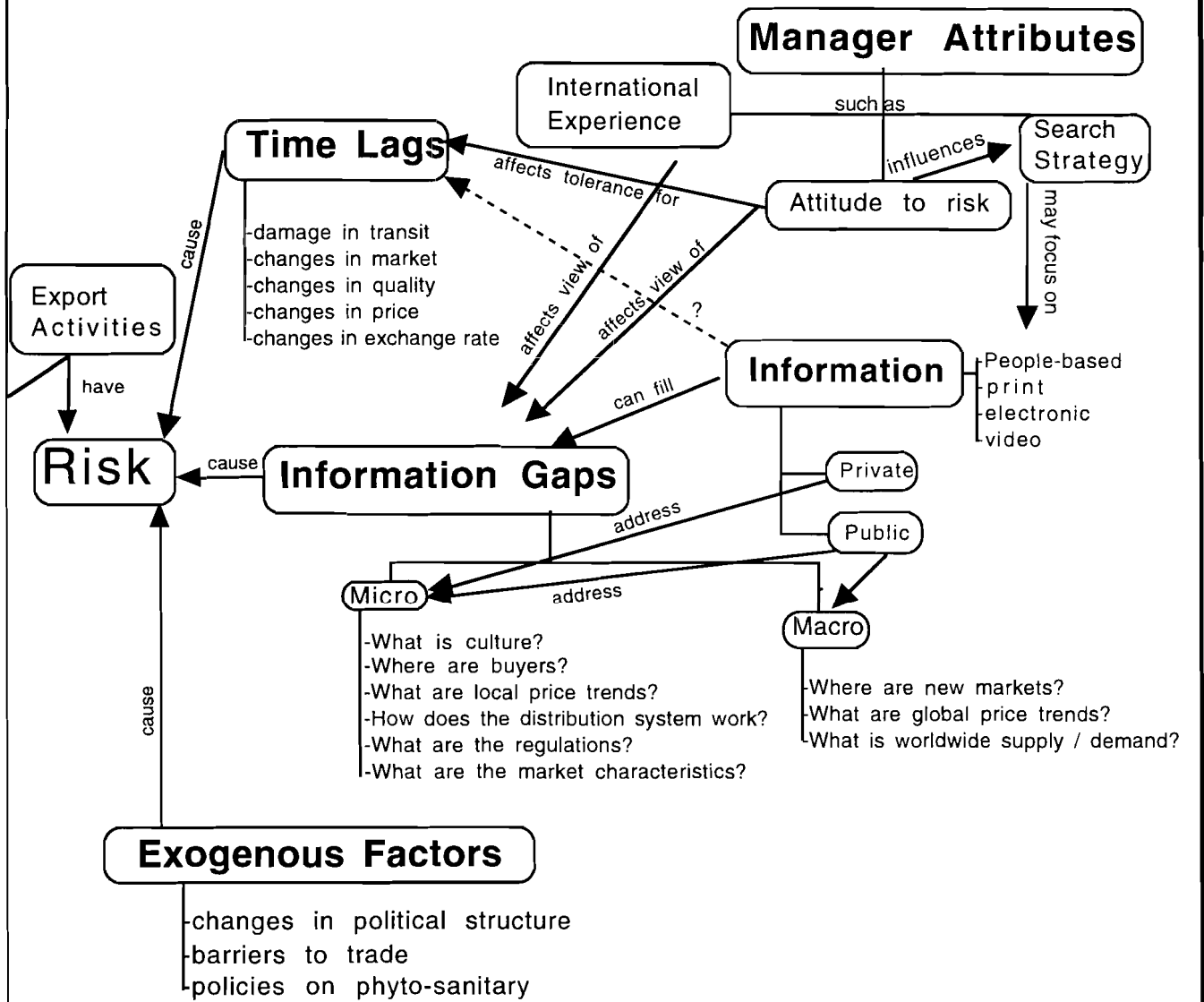


Figure 2. Concept Map of Exporter Risk



The role of the public and private sources of information is also portrayed in Figure 2. Typically, public agencies have concentrated on solving macro information gaps, by gathering data on new markets and current national price trends. But the government has also made some efforts to help exporters understand foreign markets through trade shows, trade missions, and educational materials, such as videos on exporting environments. Reports issued by FAS trade posts address a variety of micro information gaps, but do not address highly localized information gaps faced by exporters.

Traditionally, government information has been delivered in print medium. However, there has been considerable recent effort to make use of the Internet as a delivery vehicle.<sup>2</sup> In part, the movement toward electronic delivery has been motivated by economic concerns and the desire for a broader and more cost-efficient reach of governmental efforts in promoting exports.

There are some important questions that emerge from the conceptual framework:

1. Do active exporters and would-be exporters focus on the same aspects of risk? If not, will simply gathering additional information be effective in coaxing additional agricultural firms to export?
2. Is the information currently provided by USDA addressing the sources of risk which would-be exporters consider most troubling?
3. Do the means of information dissemination currently employed by USDA match the search strategies of the business firm? Specifically, do most managers have a search strategy that includes the Internet and WWW?
4. What types of information can the public sector most effectively and efficiently provide (as compared to the private sector?)
5. How do attitudes towards risk affect the search behavior of managers?
6. What types of information technologies are being used, or might be used to address the risks associated with time lags?

These and other questions emerging from the overall framework motivated the survey and focus group research that is the basis for this study. The larger survey was used to measure the reach and usefulness of USDA information products for agricultural producers. The survey was also intended to identify challenges facing the respondents. A summary of the results from the survey are contained in a subsequent section of this report.

The focus groups were conducted to have a more in-depth look at the behavior of exporters and would-be exporters. For example, we sought to discover whether participants in the markets would validate or refute the reward and risk factors we had identified. In addition, we were very interested in how exporters behaved in the information arena. The conceptual framework shows the link between the complexity of the information (how many gaps, how big) and the riskiness of overseas sales, so understanding information-seeking behavior and perceived information barriers was an important research question.

---

<sup>2</sup> A complete discussion of information sources on the Internet is beyond the scope of this report. However, it should be noted that the USDA is making substantial efforts to assist clients by posting information on the World Wide Web. See, for example, the following World Wide Web sites: <http://ffas.usda.gov/ffas/exassist.html>; <http://ffas.usda.gov/ffas/expprog.html>; <http://ffas.usda.gov/ffas/tradesho.html>.

Another linkage we wished to explore was the importance of managerial attitudes in export activities. Would managers with some international experience be more likely to succeed in building exports? How would the attitude of business owners toward government influence their approach to selling overseas? Furthermore, do attitudes towards risk help distinguish successful vs. unsuccessful exporters? We also became interested in the question of whether size and location would have an impact on exporting and/or information-seeking behavior.

Thus, reviewing previous work and building the conceptual framework for our study helped to frame the interesting research questions. The next two sections are devoted to a discussion of the study design and the presentation of the some key results of the larger survey.

### **Study Design and Methodology**

A common assumption is that information is instrumental in export marketing decisions, but little concrete data are available on information-seeking behaviors at the firm level. Although the 1994 survey of agricultural exporters was comprehensive and national in scope, it concentrated solely on firms which already had a presence in export markets. Firms not engaged in exports but motivated to do so were not the subject of the mail survey. Thus, the issue of search behavior of successful and would-be exporters was not put to rest in that research. That is, inferences about firms which do not export can only be conditional if one's evidence is drawn from firms actively engaged in export activity. To explore the information question in more detail and hone in on the decision to enter an export marketing channel, we turned to a different analytical tool: focus groups.

A focus group is a guided group discussion with targeted participants. It is a method used to raise issues among key players in a given arena, test new ideas, and generate brainstorming. Unlike large-scale surveys, which can be used to generalize to a population, focus groups are specifically designed to explore issues in depth with pre-selected players in the population. The viewpoints of the players are considered valuable because they represent a particular profile. Questions are formulated in a way that leads to interactive discussion, with the intended result of surfacing issues and opinions of the group.

The firms of interest in our focus groups were both experienced and would-be apple exporters. Our questions were aimed at a discussion of their frustrations and successes in exporting (or attempts to export) and an exploration of their information search strategies. In particular, we were interested to hear how they felt public agencies might fine-tune some of their informational products. Also, we used the focus groups to address the need of USDA to obtain direct insight into how recent changes in information technologies --the Internet for example--are altering the effectiveness of their export promotion programs.

To gain precision in the group discussions, we decided to concentrate on a single commodity. We investigated various products, and decided to work with firms which handle a high-value, fresh market agricultural product. After some evaluation of the options, it was decided that apples shipped fresh in bulk were the best choice. Focusing on apple shippers, we were able to compare between two geographic areas (East Coast and West Coast) and firms who differ materially in sales volume and product lines. This approach allowed us to explore results which may give insights relevant to other fresh market products. Finally, the apple industry has been putting considerable emphasis on exports in recent years, making our query timely and targeted on a proactive segment of the US food sector.

To improve the information base, we developed a list of firms that we wanted to consider as potential focus group participants, with the goal of conducting two focus groups in New York and two in California. In order to narrow the list to six to eight companies to participate in each of our four focus groups, we developed certain profiles we wanted to attract as focus group participants. The first consideration was based on whether or not the packers were active in export markets, because we wanted both participants with experience and those who aspired to the overseas market.

For both the currently exporting firms and would-be exporters, we sought variety in terms of size, and place in the marketing chain (grower, packer, broker, exporter). For the experienced exporters, we included participants who had many years of experience as well as those who had a more recent track record. In the case of would-be exporters, we sought individuals who had an active interest in exporting. Some had previously tried exporting and had mixed results, and others were completely new to the arena, but all shared a common interest in expanding their activities in overseas sales.

These criteria were used as benchmarks as steps were taken to assemble the focus groups. In addition, we wanted to identify participants who were likely to perform in a group setting (speak their minds, share insights, etc.).

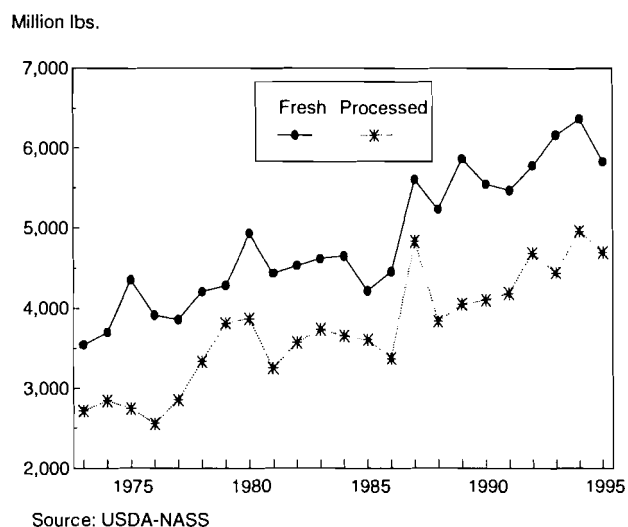
At the outset, it was recognized that some firms are avowedly inattentive to export markets. An overt effort was made to exclude such firms from the focus groups, and no attempt was made to use the forum to debate the merits of exporting. Instead, we chose firms with an aptitude for and an interest in exporting. Lists of firms known to be involved in or considering exports of fresh market apples were gathered with assistance from trade associations and extension and university contacts.

Facilitated discussion over a 5-hour session focused the group on four questions:

- What is your current view of the export scene?
- What are the biggest challenges for exporters?
- How do you tackle the information question?
- In a perfect world, what informational products would be helpful and what venues would be desirable?

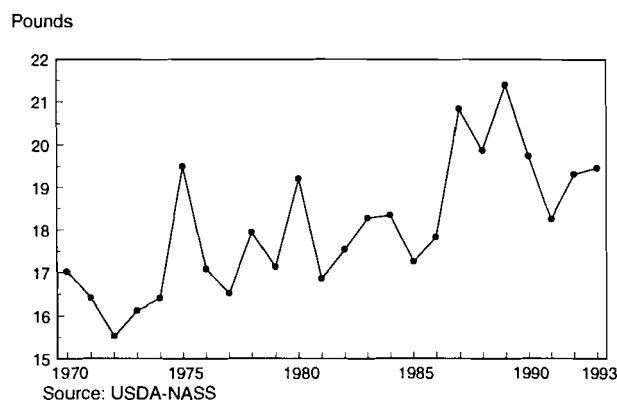
## The Apple Industry

**Figure 3. US utilization of apples, 1973-95**



Some background on the apple industry provides context for interpreting the results of the survey and focus groups. According to the USDA (1996), citrus and deciduous fruits presently account for about 3.1 million acres--less than one percent of the total cropland base--and generate cash receipts in the \$9 billion range. Citrus and deciduous receipts are nearly five percent of total cash receipts for American agriculture. The US fruit industry has been a growth industry. Acreage has remained fairly stable over the last quarter century, but cash receipts have increased steadily, reflecting improved land productivity and favorable shifts in both domestic and export demand for fresh fruit and for some fruit products.

**Figure 4. US per capita consumption of fresh apples, 1970-93**

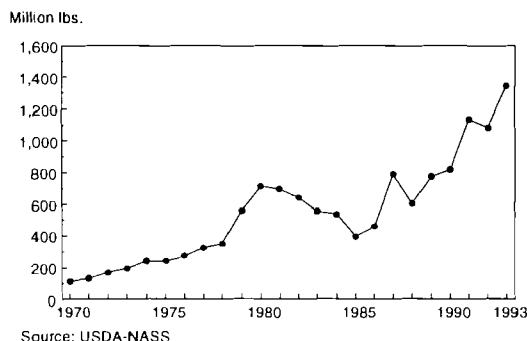


Growth in acreage and income are clearly present in the US apple industry. Utilization of apples for fresh market and for processing has increased materially since the early 1970s (Figure 3)<sup>3</sup>. Upward trends in apple production have been propelled by increased consumption at home and by some very dramatic increases in export sales. On the domestic scene, per head consumption of fresh apples has moved erratically from year to year, but has persistently trended upward (Figure 4). Similarly, an increasing volume of fresh apples has moved

to export markets. The aggregate level of fresh apple exports increased over six-fold since the early 1970's (Figure 5). Shipments to other countries have been increasing dramatically in the last decade. Between 1985 and 1993, exports of fresh apples increased from 400 to 1345 million pounds. During this period, the proportion of the US fresh apple crop finding an export market increased from 9 to 23 percent—see Figures 3 and 5.

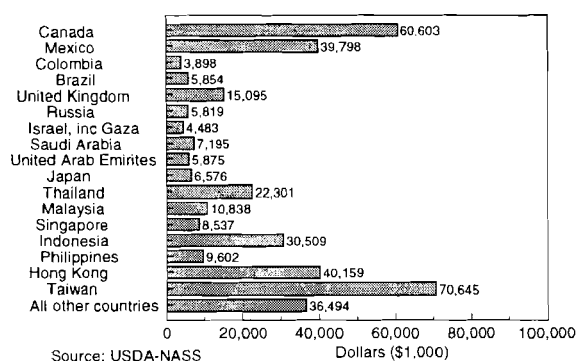
<sup>3</sup> Data for Figures 3-8 in this section of the report were assembled by accessing USDA electronic data files resident at the following World Wide Web site: <http://www.mannlib.cornell.edu:80/usda/>

**Figure 5. US exports of fresh apples, 1970-93**



Destinations of fresh apple exports are shown in Figure 6. The Pacific Rim is very significant, with over 50 percent of the 1995 export volume moving to countries in South-east Asia. Exports to Taiwan were the largest in this category and alone accounted for 18 percent of total exports; together, Taiwan and Hong Kong account for about one in every five dollars generated in the US trade in fresh market apples. In contrast, sales in Western Europe account for about 6 percent of all sales volume, the bulk of that coming from the European Union (EU) countries. Of these exports, sales are dominated by shipments to the United Kingdom. The UK alone accounts for 70 percent of the export volume to EU countries.

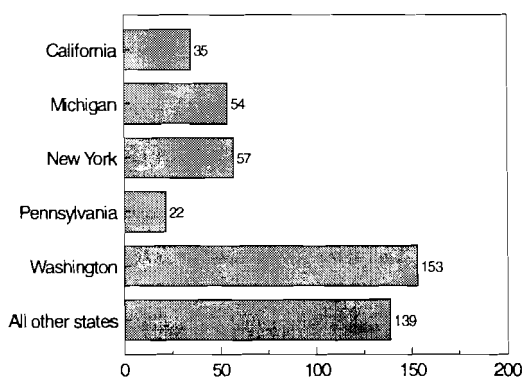
**Figure 6. U.S. exports of fresh apples by destination, by calendar year 1995**



About one quarter of US exports of fresh apples are not really “off-shore sales” but involve sales in Canada and Mexico. Significant export volumes are present elsewhere in the Americas and the Caribbean. Middle Eastern countries are also important (Figure 6).

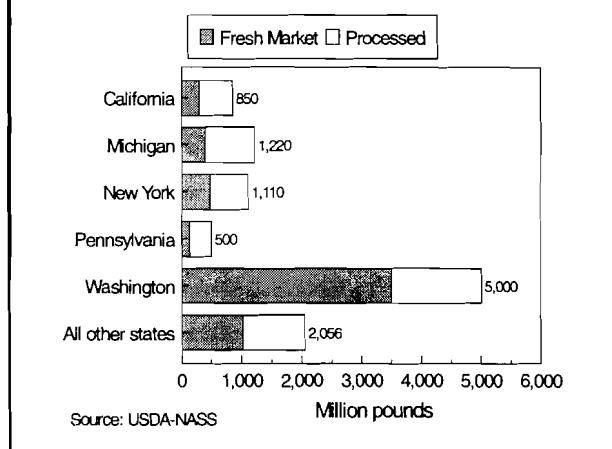
Commercial apple production occupies about 460,000 acres of US cropland. Of this amount, 70 percent of the total acreage is located in California, Michigan, New York, Pennsylvania, and Washington (Figure 7). Washington State is dominant among these states with a bearing commercial apple acreage of 153,000 acres and ranks first in apple production by a large margin. Michigan and New York have similar acreages in the 55,000 range, while California has 35,000 acres. Although many factors affect land productivity in crop production, the aggregate volume of commercial apple production—taking into account production for both fresh and processed markets—shows a similar pattern.

**Figure 7. Bearing acreage for all U.S. commercial apple production, 1995**



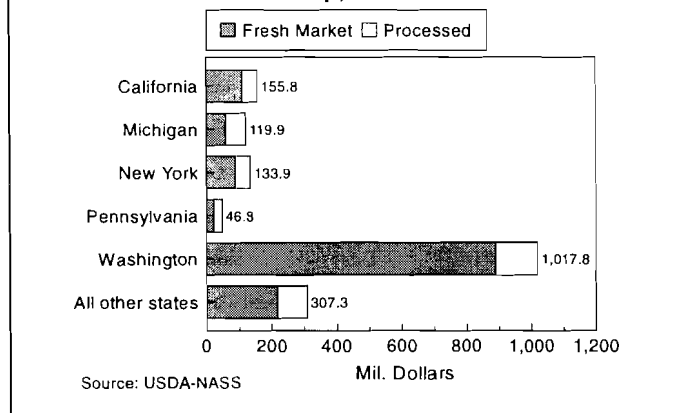
The five dominant states have relatively higher land productivity and account for just over 80 percent of production volume (Figure 8). Washington State has one-third of the commercial apple acreage but its share of national production volume is hovering in the 50 percent range. New York and Michigan



**Figure 8. Disposition of the U.S. apple crop, 1995**

have swings in production, but together, the share of commercial output has been in the 20 percent range during the 1990s. California's crop can be as large as the crop in New York or Michigan in any given year, and accounts for around 10 percent of US output at present.

The interstate picture changes when production for fresh markets, the focus of this study, is considered. The proportion of the US crop moving to fresh markets has been increasing, as noted earlier, and the major production regions are presently leveraged differently in these market segments. In Washington State, 70 percent of the production is for fresh market, compared to the US average of about 55 percent. In California and Michigan the ratio is nearly reversed, with about two-thirds of all commercial output in these two states moving to the lower-valued processing markets. About 40 percent of New York production was for fresh markets in 1995 (Figure 8).

**Figure 9. Production value of the U.S. apple crop, 1995**

It is important to consider interstate differences in dollar terms, because of the varietal differences and other quality considerations now operative in the fresh apple market. In dollar terms, the fresh market crop moves up in economic importance. The Washington State fresh market crop accounts for about 85 percent of total value, compared to the US average of more than 75 percent (Figure 9). The fresh market value fraction in New York and California is in the high 60 to 70 percent range.

### Some Relevant Results From the 1994 Agricultural Exporters Survey<sup>4</sup>

Based on gross sales, the 1994 USDA survey showed that agricultural exporters are dominated by larger firms. About 60 percent of the companies responding had gross sales exceeding \$10 million; five percent had sales under \$500,000; another 5 percent had sales in the \$500,000-1,000,000 range. Nearly one-third fall in the \$1-10 million category. Export destinations are varied and many respondents, as expected, are active in several regional export markets. Most firms export a single product and have been active exporters for several years.

<sup>4</sup> This section draws exclusively from Bills, Maestro-Scherer, and Neenan (1995).

Respondents were asked to indicate the sources of information used in recent years. The survey checked for sources in both the public and private sectors, and included questions on informal sources of information, such as the networking and sharing that can occur among exporting firms with similar interests or problems. About two-thirds of all firms responding to the survey indicated that they secured information directly from USDA sources. Among other public sources, state departments of agriculture were mentioned by 43 percent of all respondents; departments of commerce at the state and Federal level were mentioned by roughly 15 percent of all respondents.

Networking with other exporters was identified as an information source by one-third of all respondents, but a higher percentage--46 percent and 38 percent, respectively--mentioned export agents and trade associations as an information source. Financial institutions were also viewed by the respondents as an information source in some cases, but universities and private consultants appear to occupy only a minor position in the direct information flow to agricultural exporters.

The USDA administers several export enhancement programs. A focal point of the survey was querying respondents on their knowledge and exposure to both program services and lists/publications. Each respondent was given the opportunity to recall any program used over the past three years. Findings showed that while agricultural and food exporters indicate USDA as a primary information source, most are unaware of several major USDA programs and services aimed at overseas markets. For example, in all cases, 60 percent or more of all firms responding indicated that they were not aware and had not used the USDA's Trade Shows Office, Trade Assistance and Promotion Office, the Market Promotion Program (MPP), or AgExport Connections.

In contrast, products with the greatest potential for immediate benefits to agricultural firms were more familiar to the respondents. For example, *Trade Leads*--a product that can generate direct contact with a customer or client--was recognized by over 60 percent of all respondents. Similarly, relatively higher levels of awareness are evident for lists of foreign buyers of specific US products, advertising distributed directly to foreign buyers (*Buyer Alert*) and *AgExporter Magazine*, which each month highlights export markets for US products.

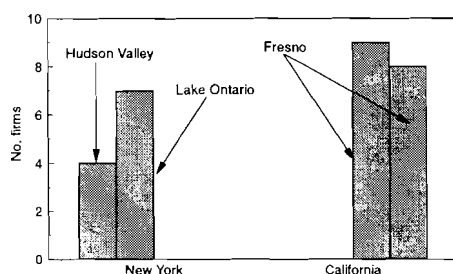
Actual use of lists and publications ranged between 5 and 25 percent depending on the product. Overall, *Trade Leads* registered the highest level of recognition and use. At the other extreme, AgExport Action Kits (which packages information on all USDA export services), *Agri-trade Highlights*, and US supplier lists have been used by 5 percent of export firms over the past three years.

Little consensus developed with regard to views on the usefulness of USDA lists and publications. In general, respondents who were in a position to rate the product took the position that the material was helpful in expanding food and agricultural exports. However, given the low rate of recognition of other products, it is difficult to draw any additional conclusions.

## Background on Focus Group Participants

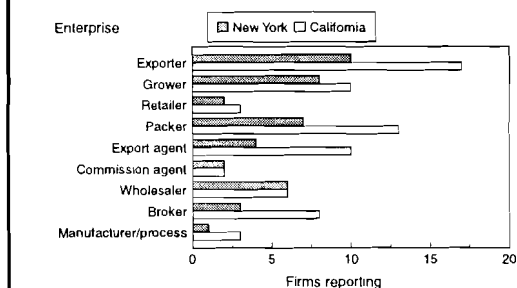
The focus groups for this study were chosen to include a variety of different profiles found in the apple industry. A primary goal was to include a range of experience levels with regard to exporting. We also sought variety in terms of firm size, as reflected in gross sales volume, and place in the marketing chain (grower, packer, broker, exporter). Necessity dictated that we combine these benchmarks with the practical considerations of logistics and temperament. For example, it was necessary to consider who could travel to the meeting site on the same day and would be inclined to contribute constructively to a discussion in a group setting (speak their minds, share insights, etc.).

**Figure 10. Number of firms represented in four focus groups, June 1996**



Assembling focus groups to meet several desired criteria is a challenge. In particular, it is difficult to identify “would-be” exporters in the purest sense of the term -- a packer with zero previous experience now ready to try overseas marketing. Therefore, most of the “would-be” exporters in the focus groups do have at least some modest exposure to overseas selling. However, they view their firms as inexperienced in exporting and have a desire to increase their presence overseas.

**Figure 11. Commercial enterprises conducted by focus group firms, June 1996**

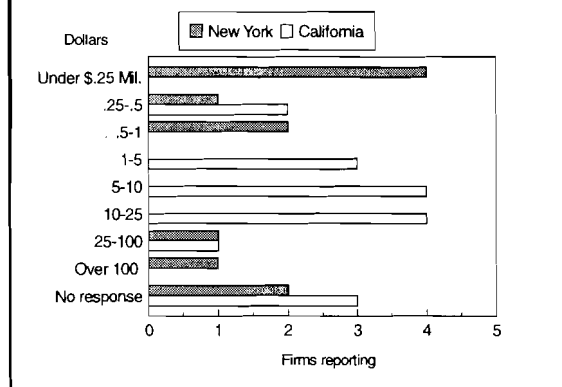


Four focus groups were conducted during June 1996, with numbers of participants varying between four and nine firms at each session (Figure 10). We had contacts with firms located in both of New York’s principle apple growing regions—near Lake Ontario and the Hudson Valley. Both California focus groups involved firms in the Central Valley who were within easy driving distance to a Fresno, California meeting site. Data on firm characteristics were collected on-site and during follow-up activities. Many of the firms reported participation in more than one

activity (Figure 11). Most were involved in direct sales into export markets, with 10 of 11 and all 17 participants in New York and California, respectively, representing firms that currently export fresh market apples. Some also produced apples, and/or operated packing houses. Participants also included brokers and export agents.

Closely related to the mix of enterprise is firm size and dependence upon off-shore markets as an outlet for fresh apples. Not unexpectedly, the differences between New York and California firms are striking, with larger firms relatively more dependent on export sales represented in larger numbers on the West Coast (Figures 12 and 13). While New York firms were generally either very large or very small, California had more firms in the middle range.

**Figure 12. Total gross sales for focus group firms, calendar 1995**

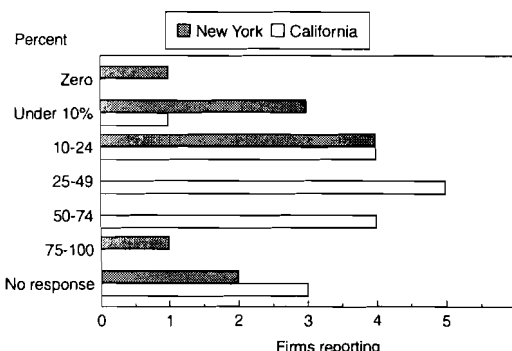


New York and California reported 10 or more years of exposure to exports of fresh market apples. In sharp contrast, California firms had far more robust expectations about the volume of future apple exports than their counterparts in New York. Over three-quarters of the focus group participants expected larger export shipments over the next three years, compared with less than 50 percent of the New York firms.

West Coast firms, situated in this case in the large Central Valley of California, are much more diversified in product terms compared to New York firms. New York firms were generally more dependent on apples as a revenue source, while many of the California firms were typically involved with a number of tree and vine crops.

We asked exporting firms about number of years experience in apple exporting and found few differences between East and West coast firms. More than 50 percent of the firms in

**Figure 13. Export sales as a percent of total gross sales for focus group firms**



## The Focus Group Results

The results of the focus group meetings built on the survey results and yielded some interesting evidence with regard to our key research questions on risk, complexity of information, management variables, and size factors. Focus groups are not used to generalize to the population; instead they are used to highlight key issues and to explore specific areas with a particular audience. Therefore, the discussion that follows is intended as an organized discussion of the issues that rose to the surface in the course of conducting four focus groups.

In talking with apple packers in New York and California, several broad themes emerged regarding: the profitability of current export markets, the perceived void of new markets, exporters views about government policies on exports, and the need for help coping with large amounts of information. This section begins with a discussion of the four themes and some policy implications.

Following the presentation of the broader themes is a discussion of the importance of the “chain” of players that are part of each and every export event. Understanding the logistics and structural realities of apple exporting is a useful preface to gaining an awareness of the risks involved in overseas sales.

The focus groups provided success stories, identification of stumbling blocks, and many different views on the pros and cons of exporting. The section continues with a discussion of how the views of experienced exporters differed from those who are either just starting to export or have had discouraging experiences in overseas markets. Finally, the specific questions raised in the conceptual section of the paper are discussed as a conclusion to the section.

## Major Themes

**Theme #1: “High returns in apple exporting may be attracting ‘too many’ inexperienced , players.”**

*“..if we can put the excess supply into export...it normally has been more lucrative than the domestic market.” (NY )*

*“Exports are a primary opportunity because of high return.” (CA)*

*“I think the export market is sought after as being the highest, or the best---the one that returns the most money.” (CA)*

When asked why they were exporting apples, participants in the focus group gave a variety of answers, but most viewed the export market as a high-return alternative for their product. Although it is clear that for apple packers the export market still offers profitable returns, there was considerable sentiment that the shine is off the export markets. “Export marketing is not what it used to be,” complained one participant. High prices have attracted extra players, some of whom lack product or market knowledge and cause problems

for active exports. Apparently, where returns to exports are perceived as relatively high, many players have been drawn into the markets. And while the barriers to entry have been lowered, the failure rate is high.

*“the biggest thing in the last few years....is levels of competition have increased tremendously, which...have caused most of the problems with the export markets...the buyers have more ammunition...picking and choosing a little more....They raise the requirements on the fruits in terms of the condition, color, grading, sizing...” (NY)*

Interestingly, the East and West Coast groups voiced differences in terms of the problems created by the competition in the market. The New York participants tended to view the problem as one of toughening standards from buyers for their products.

By contrast, California exporters seemed more worried that inexperienced exporters could “ruin the market” with inconsistent performance of product or use of unprofessional business practices. It was noted that sometimes newer exporters barge ahead in markets and do not exercise good judgment about

*“Bad shippers and bad shipments affect us all....listen to your mentors and follow their advice. Sometimes you do not ship---this is tough for the grower to deal with, like saying ‘your kids are not good looking this year’.” (CA)*

shipping a lower quality product.

**Policy implication:** There is an interesting and difficult policy implication: If public policy creates incentives or assistance to new exporters, it should also be designed to educate the exporters in a way that prevents them from “spoiling” the image of the American apple exporter. If no education effort is made and the attraction of high returns in the markets continues to bring new entrants, we run the risk of losing our global position in the long term.

## **Theme #2 “Traditional overseas markets are maturing and new markets hold limited short-term potential”**

Despite the views of participants pointing towards the enormous globalization of the packing industry, the viewpoint emerged that no truly “new” markets are out there to be exploited. In the minds of even the most experienced growers, virtually every market for their product has already been discovered and developed by someone. This pessimism about markets exists despite the great market potential evidenced in China, Indonesia and many other nations. Today the export arena is viewed as crowded, especially when compared with the situation ten years ago, when a market might be easily dominated by the U.S. because few competitors had successfully penetrated the region.

**Policy implication:** Exporters need help identifying potential new markets. The right type of information might encourage packers to re-evaluate the opportunity to gain an early advantage in an unexplored region. Obviously, part of entering new markets (such as Eastern Europe) requires adequate risk management. In addition, American exporters should seek opportunities where they can sustain a competitive advantage as others enter their market.

## **Theme #3: “We wish other countries would relax their barriers to our product, but we don’t want our domestic markets so crowded with foreign apples.”**

The conflict of interest evidenced in this paradox is common among many agricultural producers. Shippers desire open and transparent markets for their products. Apple packers felt especially irritated by what they saw as retaliatory activity in the phyto-sanitary area. Examples were cited in Brazil and Israel, which recently toughened their policies.

There was also some feeling of resentment about perceived attitudes in certain parts of USDA:

*“..Sometimes I feel real offended as a U.S. citizen in dealing with some of our organizations in the USDA/FAS group...that they are more concerned with other countries than they are about the U.S. position, and coming down hard in support of U.S. interest.” (CA)*

**Policy implication:** Policies that help producers understand and meet strict import rules in other companies could be helpful in reducing this barrier.

## **Theme #4: “It’s not really just getting information that is important--now we need help sorting it.”**

USDA is concerned with providing useful and accurate information to help promote export activities. But the growers and packers that we talked with did not express a lack of information--rather they felt overwhelmed by the flow of information in their direction. The

*"I don't care if we get it on CD ROM. I don't care if we get it on the Internet. I don't care if we get it on the fax. I don't care if we get it in the mail. I just care about the quality of the product, the quality of the information we get." (CA)*

feeling came across that one could spend most of the work day just reading faxes, exploring the Internet, or reading existing publications. One participant said simply, "We have enough information."

The focus of the discussions was on finding a better filter for information. There was not as much concern about the delivery vehicle as the quality of the information and dealing with the overwhelming quantity.

While many participants expressed the view that they do not have time to explore the Internet, others are experimenting with Web pages and establishing an Internet presence.

**Policy implication:** One implication of this paradox is that there is a role for someone, perhaps the industry association, to provide useful filters. In addition, there are some implications for Web design for public agencies attempting to expand the reach of their information base. While it makes sense to use the Web's capacities to link massive amounts of information, sites will only be successful if they are designed with an interface facilitating simple searches and do not overwhelm the user.

Of course, if the government is successful in increasing access to useful information, it will lower the barriers to exporting even further, which could increase the problems raised in Theme #1.

*"As more information becomes readily accessible...there is a greater risk of people trying to get involved in this type of business because it looks easy...and profitable." (CA)*

## The Apple Marketing Chain and Types of Risk

One focus group participant held up his two hands and waving his fingers back and forth urged us to consider the "links in the chain" and how they affect the risks faced by the apple exporter. His point was that as apples are handled along the chain, there are risks of financial exposure, physical damage to the product, and delays.

At a minimum, the apple "chain" consists of the:

- Nurserymen
- Growers
- Packers
- Shippers
- Exporters
- Importers
- Retailers
- Consumers

There are even some important intermediate links in the chain, such as truckers and haulers which can create problems. One California exporter told of a problem with a refrigeration unit in a truck that was malfunctioning. Even though the temperature was read as appropriate when the exporter loaded the apples, the unit malfunctioned enroute. To make matters worst, the driver got lost on the way to the port and ended up arriving with apples that had been exposed to zero degrees, which ruined the shipment.

Some problems, such as the trucking example, can be avoided through selection of carrier, proper loading procedures and careful insurance coverage. But the apple marketing “chain”

*“...the requirements can be so iffy...there can be so many hoops to go through, be it inspection, palpation, strapper, preparation, it’s all an expense..” (NY)*

creates many other risks that are more difficult to manage. Returning to the conceptual framework presented earlier, the chain creates many of the time lags that increase

the exporting risk. As a result, exporters on both coasts definitely perceive their risks as high relative to those of domestic markets.

The groups identified the following risks associated with the chain of production and marketing:

- Nutrition risk
- Inspection risk
- Transportation risk
- Phyto-sanitary risk
- Accounts payable risk (payments risk)
- Quality risk

Inspection risk was a strong theme with the East Coast focus groups. At the exporting end, USDA inspectors use their best judgment to categorize and classify the quality of apples before they leave port. However, upon arrival at the off-shore market, the apples are re-inspected and may be judged differently (due to different standards, in-transit degradation, etc.).

*“What will pass here--an apple that is not out of grade here--they’ll kick it over there.” (NY)*

*“You’ve got a two-week span between the product leaving your place until it’s received, and a lot of funny things seem to happen sometimes on the ocean....and no one is really there to...counteract any claims.” (NY)*

There was some feeling that the inspection risks also made it possible for importers to “adjust” their order by rejecting fruit through the inspection process, thus reducing their order in a weak market.

Although the West Coast groups also mentioned problems with differences in inspection at the

*“..sometimes an apple that’s inspected in the US is great, great---then it goes to Canada, and assuming no transport damage, it’s the same apple that left here two days ago. It’s not like a forever trip up there either. But they don’t honor our inspection.” (CA)*

export point vs. the import point as a risk, in general they were able to address discrepancies in inspection practices by “getting on a plane and going to the port” to confront unfair decisions. Smaller packers on the East Coast did not have the resources to achieve the same level of auditing and so far do not have a cooperative arm to achieve such a policing effort.



A risk that was brought out by the West Coast participants was the issue of long term shifts in demands. Due to the long time lag between the “breeding and feeding” of apples, it is possible for significant changes to occur in tastes and preferences. Ironically, the nurseryman, who bears the largest risk if the wrong variety is cultivated, is the most removed from market research and market awareness.

*“I think that we are just in a high risk business, and the importers, just like ourselves, can only project what this product might look like, might sell for, might be accepted---you know it really comes down to the customer. No matter what we’re talking about, it’s all in the hands of the consumer....so the importer really doesn’t have control and they’re going out on a limb, placing orders for fruit that they hope will sell in the marketplace.” (CA)*

New York growers also seemed more concerned with nonpayment issues than Californian respondents. In fact, financial risk overall was a strong focus of the concerns of the East Coast participants:

*“I don’t think we’re ever in a situation where our results on exports exceed our expectations. Usually the situation is totally the opposite, relative to quality reports coming back on the fruit, relative to payment and terms of payment, length of time to get paid, completeness of payments....it’s all problematic.” (NY)*

It is important to note that technology and information can only go so far in reducing certain types of risks. Using the conceptual framework, it is clear that public policy can act to fill in some of the information gaps and reduce risks in the micro and macro environment. However, insurance and risk management strategies are most effective in dealing with risks created by time lags. Some risks, such as those caused by exogenous factors simply cannot be addressed through information strategies.

### **Success Stories, Stumbling Blocks, and Differing Viewpoints**

The focus group discussions were filled with individual anecdotes. Individual exporters from various groups could be identified as successful, experienced exporters, while others could be viewed more appropriately as “would-be” exporters; either due to lack of experience or because of discouraging past experiences. There were certain elements and experiences that characterized the two groups, as summarized in the following matrix.

Characteristics	Experienced Exporters	"Would-be" Exporters
<b>Key concerns</b>	<ul style="list-style-type: none"> <li>• long term shifts in the market</li> <li>• entrance of inexperienced exporters</li> <li>• vulnerabilities created by the marketing chain</li> </ul>	<ul style="list-style-type: none"> <li>• low prices due to competition</li> <li>• difficulties meeting quality expectations</li> <li>• nonpayment problems</li> <li>• lack of continuity and consistency of markets from year to year</li> <li>• changes in phyto-sanitary requirements</li> </ul>
<b>Marketing Strategies</b>	<ul style="list-style-type: none"> <li>• strong network of leads</li> <li>• focused on a particular market; do not dabble</li> <li>• deal with problems by "going there"</li> </ul>	<ul style="list-style-type: none"> <li>• move around to a variety of export sites, following prices at a given time in the market</li> <li>• rely on intermediaries to find markets</li> </ul>
<b>Orientation toward exports vs. domestic sales</b>	<ul style="list-style-type: none"> <li>• exports are primary focus</li> </ul>	<ul style="list-style-type: none"> <li>• exports are a residual market for product which cannot be sold domestically</li> </ul>
<b>International experience</b>	<ul style="list-style-type: none"> <li>• likely to have some overseas experience at some time in their lives</li> <li>• travel regularly to overseas customer sites and have first hand knowledge of export environment</li> </ul>	<ul style="list-style-type: none"> <li>• may not have any experience with foreign travel</li> <li>• have no presence at import site</li> </ul>
<b>Attitude to risk and self perception</b>	<ul style="list-style-type: none"> <li>• view export risks imposed by exogenous events as acceptable</li> <li>• concerned with managing risks caused by time lags</li> <li>• view themselves as pro-active</li> <li>• focused on ways to solve the information gaps</li> </ul>	<ul style="list-style-type: none"> <li>• view exogenous events as a major threat to healthy exporting - very risk averse</li> <li>• focus on time lag risks such as nonpayment</li> <li>• feel overwhelmed by the obstacles</li> </ul>
<b>Size</b>	<ul style="list-style-type: none"> <li>• large enough to exploit exports with their own product</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>• have formed strategic alliances with others to jointly export</li> </ul>	<ul style="list-style-type: none"> <li>• too small to successfully fill large export orders</li> </ul> <p>and</p> <ul style="list-style-type: none"> <li>• unable or unwilling to achieve successful alliances</li> </ul>
<b>Information needs</b>	<ul style="list-style-type: none"> <li>• believe only they can develop a qualified list</li> <li>• desire better long term and short term supply/demand information</li> </ul>	<ul style="list-style-type: none"> <li>• desire a qualified buyers list</li> <li>• need information regarding export procedures, trade logistics</li> </ul>
<b>Attitude toward new information technologies</b>	<ul style="list-style-type: none"> <li>• cautious</li> <li>• can envision future role of visual technologies and use of Internet</li> </ul>	<ul style="list-style-type: none"> <li>• skeptical</li> <li>• do not view the industry as ready for the Internet</li> </ul>

*"I think the reason some markets are there one year and not another isn't because someone chooses to buy from someone else...it is a matter of changes in world supply." (NY)*

Experienced exporters were most concerned with understanding and anticipating long term shifts in supply and demand in the market, while "would-be" exporters were struggling more with meeting expectations of importers and with dissatisfaction about price level. Although both groups articulated concerns about financial risk,

"would-be" exporters focused heavily on the issues surrounding non-payment.

Success stories from both East and West Coast participants were associated with exporters who had

*"It's not hard to find people to buy. It's very hard to find people to accept and pay." (NY)*

targeted a particular area and had built contacts and strategies customized for a particular market. For West Coast participants, the focus tended to be Asian countries, while successful

*"I think no matter where you sell your apples, that you have to have a specific marketing plan." (NY)*

East Coast exporters mentioned Europe and South American more often.

*"..you find one place and that is your anchor, but do a damn good job, build up your reputation..." (CA)*

*"Exports are our primary opportunity..." (CA)*

Another major difference in viewpoints

is that experienced exporters view their markets as the primary market for their product.

"Would-be" exporters are more concerned with their residual domestic product and search out a

*"We do as little export as possible, as little export as necessary...it's the area that has the greatest exposure financially. Although we look to expand...it's with the consideration that we thought we are not going to get overall results greater than our expectations." (NY)*

*"..the more apples you can get of New York State, the better the prices will hold, and you've got to have exports to do it.. (NY)*

*"..the export market is critical to the survival of the grower, because the domestic market in the United States cannot handle the volume..[produced] without it." (NY)*

market. As a result, they have fewer resources to devote to tracking the overseas customer base, as compared to the nearby attractive domestic market. In addition, their primary motivation in exporting is to improve prices locally.

As predicted in the conceptual framework, we found that among participants, the international

experience of the exporter was a key to reducing perceived risks of overseas sales. In some cases, exporters cited individual travel overseas as affecting their view of foreign markets; in other cases, exporters considered regular overseas visits to be an absolute must for successful international marketing. In either case, there was a heightened understanding of the conditions of overseas markets, an awareness of the cultural difficulties, and a perception of the importance of a personal network accompanied by follow-through.

*"Most shippers do not travel; less than 20% have actually seen their product arrive, so they are in the dark....How do I find out? I fly to Taiwan and set things up. Take your packing house manager too, because a small stem puncture can ruin the fruit by the time it arrives. Go into the wet market; they can set up the product to enhance it or depreciate it; go to the packing shed..." (CA)*

With regard to attitudes toward risk, experienced exporters tend to view the risks that come from exogenous events as acceptable (although not desirable). Their management strategies are focused around the risks introduced by time-lags. For example, they emphasize the need for insurance and documentation

to keep liability minimized as the export product moves through the chain. By contrast, "would-be" exporters tend to lump controllable and uncontrollable risk together, and are therefore overwhelmed by the high risks they perceive in foreign markets.

*"...[after my bad experiences I learned]...you need to put it all in faxes. No more words. Write it. Put it in faxes in black and white. Keep a damn diary on it." (CA)*

*"I think risk is one of the problems, and maybe why ..a lot of farms don't export, because I think there is a lack of comfort." (NY)*

fill export orders on a consistent basis. Smaller firms can achieve this by forming strategic alliances with brokers or other growers or via product specialization (niche marketing). Larger firms may already produce adequate supplies to enter a foreign market. Especially among the New York growers, there was substantial frustration over the lack of coordination for export purposes.

Size does not necessarily determine whether a packer is successful at exporting, although the focus group participants emphasized the need for a "critical mass" to

*"An export trading company could really create the sum of its parts to equal a greater whole for all of us as shippers. I think that we can get a lot of assistance through the State and the Federal governments through an export trading company that we can't get as individual traders...and I also think that we can go out and grab larger blocks of business...but I think this is something we have to do for ourselves." (NY)*

The information needs articulated by the experienced exporters tended to be more focused on macro issues such as the size and distribution of supply and demand. By contrast, the “would-be” exporters focused on micro information needs, such as a qualified buyers list<sup>5</sup>. Both groups tended to feel they had a large amount of

*“We get information all the time from all over the place, be it our own growers...our customers. Every phone call you’re getting information...” (NY)*

*“I think you gather information in a whole host of ways, either through the newspaper or USDA or whatever. In some fashion or other in talking to other people in the industry you make up your mind that there’s an opportunity in a particular section of the world or particular country. At that point . . . it isn’t very complicated...you get a hold of the attaché in that country and you have some conversations...and then you go over there...Just pack your suitcase and get on a plane...” (NY)*

*“The Journal of Commerce...that’s probably the best source you can get. Every exporter reads that. It tells you who shipped, how many containers on each ship and what the product was. If you want to watch trends, that’s fantastic...” (CAL)*

information, and informal sources rated among the most important. Certain private sector sources were also mentioned by respondents as key sources.

The focus group findings confirmed the results of the large survey; many exporters are unaware of the products offered by the USDA. Very few of the focus group participants could name

*“The government doesn’t typically advertise too much of what they do have.” (NY)*

*“....[USDA] Agencies....we get lost in what do you call them. Which has always been a problem. And the other is the coordination of the forest of ideas of information. That’s number one. Number two is the length of time it takes to get any information back...unless you’ve gone to an FAS office and you’ve gotten acquainted with them individually. When you send a fax requesting information about an area....it could be one week, it could be six months.” (CAL)*

*“The other problem I find...is there’s a lot of protection in each agency’s area.” (CAL)*

USDA products that they used. However, when shown a list of publications, many acknowledged that they had seen such information. In addition, the participants expressed some frustration with the unwieldy structure of USDA and the components that deal with the export market. Some commented on territorialism among various agencies within USDA. However, the majority were satisfied with many of the USDA products and services that they do use.

<sup>5</sup> “Qualified” refers to whether or not the potential buyer has a good credit rating and adequate financial resources.

For the most part the suggestions that arose in the focus groups regarding USDA products centered on improving the quality of the information available. In particular, there was

*"The trade leads that we've gotten from USDA have never really panned out...the types of companies that go to the USDA to get offerings from shippers are those...that don't really know how to go about getting the information. So...when you finally do contact them, they need a total education." (CA)*

*"The problem is...I get all these leads coming across my fax machine. And it could be some kid in a garage in Israel that decides as a joke he needs a load of Empires. How do you check this stuff out? (NY)*

*"I get a fax that will say 'we are looking for Red Delicious sized at 138s.' That doesn't tell me anything. What color, what kind of wax job are they looking for, what kind of grade are they looking for, how specific, how fussy are they, what kind of regulations do they have?" (NY)*

discussion at every focus group regarding the quality of USDA trade leads. Two points were raised: 1) experienced buyers overseas do not have to resort to the trade leads vehicle, so leads are usually from "amateurs," and 2) there is not enough information provided for the leads to be interpreted and sorted.

There were a wide range of attitudes about newer vehicles of information delivery. While most exporters in the focus

group depend heavily on a fax, few were experienced users of the Internet. A demonstration of USDA's Web products at several of the focus groups was extremely well-received, especially among experienced exporters. Some of the most experienced exporters were able to articulate what the future might hold in the way of information transfer between the exporter and importer. A minority expressed skepticism.

*"I foresee the time when that [Internet access] will be very real along with digital cameras to download what you are packing right now. And you put it on and the...[importer] in Singapore says, 'yes, that's exactly what I'm looking for, then you click to another page and you can order your phyto-sanitary and USDA information and you don't have to do a lot of work.'" (NY)*

## Using the Focus Group Results to Answer Key Questions

The focus groups were extremely helpful in raising key issues regarding the use of information and export behavior. In addition, the results help to address the questions raised by the conceptual framework.

1. *Do active exporters and would-be exporters focus on the same aspects of risk? If not, will simply gathering additional information be effective in coaxing additional sellers to export?*

**Focus group response:** Would-be exporters are far more focused on issues of price and logistics, while active exporters are worried about surviving in a crowded market. Would-be exporters identified a qualified buyers list as a highly desirable product the government could supply, while the experienced exporters said that only they themselves have the knowledge and experience to develop such a list, as most of them have done. Instead, current exporters would like help sorting the existing information. In addition, information on new markets could change the current perception that most profitable market opportunities have already being fully exploited.

2. *Is the information currently provided by USDA addressing the sources of risk which would-be exporters consider most troubling?*

**Focus group response:** In terms of the conceptual framework, the would-be exporters are very concerned with two areas where information is least likely to solve the problem: obstacles caused by time lags and exogenous factors (such as changes in phyto-sanitary regulations). While successful exporters also express concern about time-lag related risks, they envision insurance and other risk management strategies as most appropriate and do not particularly look to the government to solve the problem.

3. *Do the means of information dissemination currently employed by USDA match the search strategies of producers?*

**Focus group response:** Currently, producers still rely almost exclusively on phone, fax, and paper-based information. However, time factors and the relationship aspect of business dealings place a high value on informal sources of information. Reliance on information from personal contacts may keep exporters from looking further for paper-based sources of information (such as products produced by USDA). For example, focus group participants had a low awareness of USDA products and therefore they did not realize that some of USDA's existing products already addressed issues raised by the exporters at the session.

4. *Specifically, do most managers have a search strategy that includes the Internet and the World Wide Web (WWW)?*

**Focus group response:** There was no experienced Internet user among the focus group participants. Skepticism over Web-based products centered on the confusing nature of the Internet and the lack of security for transactions. In general participants seemed to be holding back until the WWW "settles down." However, experienced exporters think that over time, as the Internet environment becomes more stable and easier to use, it will emerge as an important venue for sending and receiving information.

Interestingly, the Internet environment could be ideal for addressing two aspects of information raised by focus group participants. First, the participants emphasized the importance of informal contacts in building a network of customers. Use of e-mail in other business environments has become a standard method of building such networks. Depending on how quickly the technology is spread to the markets of exporters, e-mail could become as common as the fax for communication among apple exporters. Secondly, both experienced and would-be exporters expressed frustration with the sheer quantity of information they have to sort through. Web product development is now heavily focused on building useful filters for users interested in linking to various sources of information, but who also wish to have a focused search strategy.

5. What types of information can the public sector (as compared to the private sector) most effectively and efficiently provide?

**Focus group response:** Although the would-be exporters were quite interested in having the USDA provide a “qualified buyers” list, more experienced exporters stated that it would be unrealistic to expect government to do so. Clearly the public sector excels at providing excellent information in the macro area (supply/demand statistics, price information, economic parameters). Through efforts such as trade shows, video products, and brochures, the USDA also addresses information gaps at the micro level. However, it will always be a challenge to provide such information in a cost-effective manner, since the needs are highly localized and reaching the target market with the right information can be difficult. Focus group participants identified private sources of information (such as the *Journal of Commerce*, steamship and airline companies, freight forwarders) as the best sources of extremely time-sensitive information.

6. How do attitudes towards risk affect the search behavior of managers?

**Focus group response:** Experienced exporters have a higher tolerance for the risks inherent in overseas trade that are caused by exogenous events. Therefore, they focus their information search in more effective areas, filling information gaps and looking for ways to cope with risks associated with time delays in the export process. Would-be exporters tend to be much more risk averse, and ironically their search for good export venues therefore can be less effective. Instead of focusing on a given area and building expertise and a network, they have a tendency to dabble, which results in a higher variability in the returns.

7. What types of information technologies are being used, or might be used, to address the risks associated with time lags?

**Focus group response:** Although time lags create some risks that cannot be resolved with information, the focus groups did surface some interesting suggestions for the future. Using digital images that can be easily transmitted, transactions could be more closely monitored and coordinated. For example, one shipper mentioned using the Internet to send product photos to a prospective buyer. Instant access to important paperwork and regulations was envisioned in a futuristic Internet approach to exporting. While no one saw information technologies as a panacea, there was genuine interest in its potential for increasing the ease of exporting.



## Conclusions and Implications

The findings of the focus group, together with the results of the larger survey, point to some interesting conclusions about the characteristics of exporters vs. would-be exporters and about the search strategies they employ. For example, while experienced exporters have well-developed informal networks of information and focus their search strategies on better long term and short term supply/demand information, “would-be” exporters tend to be more concerned with locating a “qualified” buyers list, and getting information on export procedures, and trade logistics. In addition, would-be exporters expressed frustration with two types of obstacles where information is least likely to solve the problem: barriers caused by time lags and exogenous factors (such as precipitous changes in a foreign government). While successful exporters also express concern about time-lag related risks, they envision insurance and other risk management strategies as most appropriate and do not particularly look to the government to solve the problem. The implication of these findings is that the USDA and others interested in reaching and encouraging exporters may need to tailor their efforts differently for those who are at different levels of experience in exporting.

Search strategies of most producers still rely almost exclusively on phone, fax, and paper-based information. The focus group discussion revealed that the pressure of time on managers and the relationship aspect of business result in a strong reliance on information from personal contacts which may keep exporters from looking further for more formal sources of information (such as products produced by USDA). However, as Internet-based communication becomes more common among exporters, it could provide a valuable venue for USDA products.

There was a cautious attitude among participants on new information technologies due to the confusing nature of the Internet and the lack of security for transactions. However, experienced exporters think that over time, as the Internet environment becomes more stable and easier to use, it will emerge as an important venue for sending and receiving information. “Would-be” exporters had a higher level of skepticism. Improvements in the interface and education efforts focused on the Internet could help lower attitudinal barriers to using information technology as a tool in export activities.

Focus group participants raised two types of information obstacles that could be met with Internet-type products: the challenge of building a network of contacts, and the difficulty of sorting through massive amounts of information. Use of e-mail in other business environments has become a standard method of building professional networks. In addition Web product development is now heavily focused on building useful filters for users interested in linking to various sources of information, but who also wish to have a focused search strategy. Using digital images that can be easily transmitted, transactions could be more closely monitored and coordinated. While no one saw information technologies as a panacea, there was genuine interest in its potential for increasing the ease of exporting. For those interested in export promotion, the results of the study suggest two strategies: 1) support efforts which speed the widespread adoption of information technologies throughout the export marketing channels, and 2) explore the most effective and efficient ways to provide information using newer technologies, focusing on good filters, useable interfaces and appropriate content.

## References

Alexandries, C.G. "How the Major Obstacles to Expansion Can Be Overcome." Atlanta Economic Review. Vol 21, No. 5, pp. 12-15, 1971.

Barker, A. T., and Erdener Kaynak, "An Empirical Investigation of the Differences Between Initiating and Continuing Exporters." European Journal of Marketing. Vol. 26, No. 3, p. 27, 1992.

Barringer, Bruce R., Max S. Wortman, and Granger Macy, "A Challenge for Small U.S. Agribusiness: Reduction of Export Inhibitions Through Planning and Research." Agribusiness. Vol. 10, No. 6, pp. 459-469, 1994.

Bilkey, Warren J. "Variables Associated with Export Profitability." Journal of International Business Studies. Vol. 13, Fall: pp. 39-55, 1982

Bilkey, Warren and George Tesar, "The Export Behavior of Smaller-Sized Wisconsin Manufacturing Firms." Journal of International Business Studies. Vol. 8, pp. 93-101, 1977.

Bills, Nelson L., Jane Maestro-Scherer, and Rob Neenan, 1995 Survey of Agricultural Exporters. Department of Agricultural, Resource, and Managerial Economics, Cornell University, Report submitted to the USDA, Agricultural Marketing Service, 1995.

Bratkovich, Stephen M., and Larry E. Miller, "Perceived Educational Needs of Innovative Ohio Sawmill Operators." Forest Products Journal. Vol. 43, No. 3, pp. 35-40, 1993.

Burton, F.N. and B.B. Schlegelmilch, "Profile Analyses of Non-Exporters versus Exporters Grouped by Export Involvement." Management International Review. Vol. 27, No. 1, pp. 38-49, 1987.

Charlet, Barbara, and David M. Henneberry, "Oklahoma's Value-Added Agricultural Export Industry: An Analysis of Export Market Activities." Journal of International Food and Agribusiness Marketing. Vol. 3, No. 3, pp. 55-81, 1991.

Czinkota, M.R., and W.J. Johnston, "Exporting : Does Volume Make a Difference? Journal of International Business Studies. Vol 14, pp. 77-89, 1985.

Global Trade and Transportation, "Leading Reasons Against Exporting." Vol. 13, No. 5, p. 3, May 1993.

Gottko, John, and Robert McMahon, "Oregon Lumber Producers: Attitudes and Practices of Exporters and Nonexporters in the 1980's." Forest Products Journal. Vol. 39, No. 6, pp. 59-63, 1989.

Guldin, Richard W., "Exporting Southern Softwood Lumber." Forest Products Journal. Vol. 34, No. 3, pp. 37-42, 1984.

Hammett, A.L., F.W. Cubbage, and W.G. Luppold, "Southern Appalachian Hardwood Lumber Exporters: Characteristics of Exporters and Non-Exporters." Forest Products Journal. Vol. 41, No. 7, pp. 70-76, 1991.

Hammett, A.L., and Christopher E. DeForest, "Southern Hardwood Lumber Exporters: Practices and Problems." Forest Products Journal. Vol. 43, No. 3, pp. 9-14, 1993.

Hollon, Kimberly C., "Problems Encountered by Agricultural Marketing Firms in Food and Agricultural Product Exporting: Analysis of Survey Results." American Journal of Agricultural Economics. Vol. 71, No. 5, pp. 1367-1374, 1989.

Jenni, Jon K., Delivering Assistance to U.S. Agricultural Exporters: Observations from the Front Lines. Department of Agricultural, Resource, and Managerial Economics, Cornell University, Staff Paper, December 1996.

Kedia, B.L., and J. Chhokar, "Factors Inhibiting Export Performance of Firms: An Empirical Investigation." Management International Review. Vol. 26, No. 4, pp. 33-43, 1986.

Ogram, Ernest W., "Exporters and Non-Exporters: A Profile of Small Manufacturing Firms." Export Management: An International Context. pp. 70-84. Praeger Publishing, New York, NY, 1982.

Pavord, W.C., and R.G. Bogart. "The Dynamics of the Decision to Export." Akron Business and Economic Review. Vol. 6, No. 1, pp. 6-11, 1975.

Rabino, Samuel, "An Attitudinal Evaluation of an Export Incentive Program." Columbia Journal of World Business. Vol. 15, pp. 61-65, 1980.

Reid, S.D., "Exporting: Does Volume Make A Difference?-Comment." Journal of International Business Studies. Vol 16, pp. 153-155.

Reid, S. D., "Managerial and Firm Influence on Export Behavior." Journal of the Academy of Marketing Science. Vol. 11, pp. 323-332, 1983.

Ringe, James M., Donald H. Graves, and Bruce G. Hansen, "Characteristics and Marketing Methods of Kentucky Hardwood Lumber Exporters." Forest Products Journal. Vol. 37, No. 4, pp. 31-34, 1987.

Simpson, Blaude L., Jr., and Duane Kujawa, "The Export Decision Process: An Empirical Inquiry." Journal of International Business Studies. Vol. 5, No. 1, pp. 107-117, 1974.

Skold, Karl D., Gary Williams, and Marvin Hayenga, "Meat Export Marketing: Lessons from Successful Exporters." Agribusiness. Vol. 3, No. 1, pp. 83-9, 1987.

U.S. Department of Agriculture, Desk Reference Guide of U.S. Agricultural Trade. Foreign Agricultural Service, Washington, DC, 1993.

U.S. Department of Agriculture, Agricultural Outlook. USDA Economic Research Service, Washington, DC, November 1996.

U.S. Department of Agriculture, Fruit and Tree Nuts: Situation and Outlook Report. FTS-278, USDA Economic Research Service, Washington, DC, October 1996.

Walters, P.G.P., and S. Samiee. "A Model for Assessing Performance in Small U.S. Exporting Firms." Entrepreneurship Theory and Practice. Vol 15, No. 2, pp. 33-49, 1990.

Yaprak, A. "An Empirical Study of the Differences between Small Exporting and Non-Exporting U.S. Firms." International Marketing Review. Summer pp. 72-83, 1985.

OTHER A.R.M.E. RESEARCH BULLETINS

No. 96-14	An Economic Analysis of Generic Egg Advertising in California, 1985-1995	Todd M. Schmit J. Carlos Reberte Harry M. Kaiser
No. 96-15	An Ex Post Evaluation of Generic Egg Advertising in the U.S.	J. Carlos Reberte Todd M. Schmit Harry M. Kaiser
No. 96-16	Identifying Consumer Characteristics Associated with Japanese Preferences Towards Milk Products	Yasuhito Watanabe Nobuhiro Suzuki Harry M. Kaiser
No. 96-17	Distribution of Community Water Systems Across the United States with Emphasis on Size, Water Production, Ownership, and Treatment	Richard N. Boisvert Todd M. Schmit
No. 96-18	Rural Utility Service's Water and Waste Disposal Loan and Grant Program and its Contribution to Small Public Water System Improvements in New York State	Todd M. Schmit Richard N. Boisvert
No. 96-19	A Theory of Nonprice Export Promotion with Application to USDA's Subsidy Programs	Henry W. Kinnucan Hui Xiao
No. 96-20	Assessing the Effectiveness of MPP Meat Advertising and Promotion in the Japanese Market	Allison Comeau Ron C. Mittelhammer Thomas I. Wahl
No. 97-01	The Implications of Trade Liberalization for Federal Milk Marketing Orders	Phillip M. Bishop Andrew M. Novakovic